Medium Term Plan
2002-2004

1. Overview

The following sections summarise IPGRI's proposal for the plan year 2002 and subsequent two years, against a background of results and developments in 2000 and 2001. There are no significant changes to report in terms of proposed programme content. From early 2000, the IPGRI programme has been shaped by the new institutional strategy, *Diversity for Development*, launched in 1999. Activities in 2002-2004 will continue to reflect the directions defined in the strategy. There is a high level of congruence between IPGRI's strategy and the directions foreseen in discussions on the CGIAR future vision and strategy, with its people and poverty focus.

A major preoccupation in the last two years has been in planning and resourcing the work of IPGRI in a difficult funding climate. The institute has continued to grow but at a slower rate than foreseen in the Medium Term Plan for 1998-2000. IPGRI's healthy reserves allowed the institute to weather the difficulties caused by the failure of the European Commission (EC) to provide funding in 1999. A cautious approach to financial management has allowed the institute to rebuild the reserves whilst maintaining priority programme activities at a satisfactory level. Sustainability of funding for future years is a high priority and IPGRI is currently developing a resource mobilization strategy to guide the institute's efforts in diversifying and strengthening its funding base.

A particular area of concern flagged in IPGRI's 2001 Financing Plan related to the funding prospects for the System-wide Genetic Resources Programme (SGRP), including the need to bring in resources to support further investment in the upgrading of the genebanks of the CGIAR Centres. In reflection of this and of a wider need to provide sustainable funding for both the in-trust collections held by the CGIAR and the development of a rational global system of genebanks, IPGRI is leading an exercise to determine the feasibility of establishing a genebank endowment fund, the Future Harvest Global Conservation Trust. The preliminary outcome of the feasibility study will be reported at MTM 2001. IPGRI is requesting support from the Finance Committee for the SGRP including for the endowment campaign.

At the time of drafting this Medium Term Plan, IPGRI was relocating its Headquarters to new premises at Maccarese near Rome. The improved facilities at Maccarese will open up new possibilities for scientific partnership and for raising awareness of the importance of genetic resources, with the capacity to host scientific meetings, receive visiting scientists and showcase genetic diversity.

2. 2000 results and 2001 developments

2.1 Introduction

No major deviations took place in 2000 from the Medium Term Plan (2001-2003) submitted in March 2000. The project portfolio has continued to develop in line with *Diversity for Development*. The implications of the strategy for IPGRI's scientific programme were described in detail in the 2001-2003 MTP and are summarised in Section 3.2. Some activities within individual projects have been delayed or subjected to minor scaling down as a result of delays in access to restricted funding or reductions in support from some donors. The growth in the IPGRI programme confirms the trends described in the previous three MTPs. The perturbations caused by the inability of the European Commission (EC) to provide funds in 1999 have largely been overcome.

2.2 2000 Results

The 2000 Financing Plan anticipated a total 2000 Research Agenda of US$ 24.3[1] million, to be resourced from unrestricted funding (US$ 13.1 million), restricted contributions (US$ 10.9 million) and Centre income (US$ 0.3 million). The final 2000 financial statements indicate total revenues of US$ 23.5 million. Unrestricted income came in at a level of US$ 12.6 million. Behind the slightly lower figure than forecast, are a number of decreases relating to unfavourable exchange rates, some structural decreases and increases from individual donors, the conversion of EC funding from unrestricted to restricted, and a special World Bank contribution to compensate in part for loss of EC support in 1999.

The rate of restricted spending in 2000 at US$ 10.2 million was slightly lower than predicted in the 2000 financing Plan (US$ 10.9 million). Late initiation of some restricted-funded projects and slow expenditure in others was partially compensated for by the recognition of EC funding as restricted. Centre income came in at a level of US$ 0.57.

IPGRI continued a cautious approach to spending in 2000, based on the experiences of 1999 when the institute had to draw heavily on reserves. This, plus the notification by some donors of increases in unrestricted funding towards the end of 2000, has enabled the institute to rebuild its reserves significantly. Section 6.4 provides further details.

Programme achievements for 2000 will be described in the IPGRI, INIBAP and SGRP Annual Reports for 2000 (in preparation) and are reflected in the

[1] All figures rounded.

milestones described for the IPGRI project portfolio (provided in the revised logframes given in Attachment 1 to the 2001 Financing Plan submitted in September 2000). Pertinent information is also available through the Internet at http://www.ipgri.cgiar.org and http://www.sgrp.cgiar.org.

2.3 2001 Developments

The total operations for 2001 are expected to be at a level of US$ 24.5 million. This is somewhat lower than the US$ 25.7 million foreseen in the 2001-2003 MTP but is US$ 0.5 million more than expected at the time of drafting the 2001 Financing Plan proposal. Unrestricted income is expected to come in at a level of US$ 11.0 million. This shows a drop from the level in 2000 when IPGRI received the special compensation from the World Bank for loss of EC funding and support provided by the World Bank to the SGRP on the recommendation of the CGIAR Finance Committee. Restricted funding is expected to total US$ 13.1 million, the increase over 2000 reflecting the initiation or full implementation of a number of new projects on wild crop relatives, datepalm genetic resources, plant genetic resources of Central Asia, molecular approaches to improving *Musa* (banana and plantain), and neglected and underutilized species. Centre income is expected to reach US$ 0.35 million.

As in 2000, the project content will reflect the scope and emphases described in detail in the 2001-2003 MTP (for further details see Section 3.1).

3. Major features of the Project Portfolio

3.1 Highlights of the 2002 Portfolio

The IPGRI Project Portfolio comprises 20 projects, which commenced in January 1997 with an initial lifespan of 5 years (i.e. to 31 December 2001). A strategic planning exercise conducted in 1999 to translate the IPGRI strategy into action included development of an institutional logframe and logframes for each of the 20 IPGRI projects covering a time span of 2000-2004. These were submitted in revised form with the 2001 Financing Plan and are available on request.

The project logframes and related resource allocations were built up from first principles, evaluating the contents of each project against the description of the CGIAR and IPGRI logframe Outputs. This resulted in some changes in the balance of Outputs in 2001 onwards, notably an increase in the proportion of the Institute's activities' coming under the heading of "Enhancing NARS". This balance was reviewed in the process of refining the logframes for submission with the 2001 Financing Plan, was broadly confirmed at that time and is continued into the present document. It is

consistent with IPGRI's *modus operandi* which is essentially one of facilitation with a strong emphasis on providing information, tools and methodologies, training and capacity-building, promoting networking and raising awareness.

IPGRI's work will continue to be conducted through three programmes, the Plant Genetic Resources Programme, the International Network for the Improvement of Banana and Plantain (INIBAP) and the CGIAR Genetic Resources Support Programme. It will be conducted on a pan-regional basis with a high proportion of resources being allocated to Sub-Saharan Africa (SSA) and South Asia (see Table 5) and a modest expansion of work in Central Asia.

The programme content will generally reflect the areas identified in the translation of the IPGRI strategy into programme activities, with a consolidation of the traditional areas of expertise of the institute and a strengthening of specific areas. The traditional areas will include developing *ex situ* and *in situ* conservation technologies, and promoting complementary conservation strategies that maximise efficiency, security and accessibility of the genetic resources conserved for both crop and forest species. Attention will be given to generic work applicable to a broad range of genepools, as well as work on specific crops including *Musa*, coconut, cacao, coffee and datepalm.

Increased emphasis will be given to diversity management in agroecosystems (on-farm and in home gardens) and promoting mechanisms to enhance use of *ex situ*-conserved germplasm, including crop specific work to expand the genetic base of breeding efforts, and improving the accessibility of the CGIAR *ex situ* collections through initiatives of the SGRP. Increased emphasis will continue to be given to different aspects of genetic improvement of *Musa*, from evaluation of improved varieties to molecular techniques and genomics.

IPGRI will play an expanded role in incorporating a genetic diversity element into integrated natural resources management (INRM) research, through expansion of work on genetic resources management in ecosystems within the IPGRI Plant Genetic Resources Programme and through the SGRP. IPGRI will increase its involvement with wild relatives of crops and semi-domesticated species, recognising their enormous potential as sources of food and medicine, for income generation and for varietal improvement. Work in the area of forest genetic resources will move from research and methodology development to creating information products, tools and aids to decision-making, and promoting sustainable networks. Noting the importance of microbial biodiversity, IPGRI plans, through SGRP, to convene a workshop in 2001 on policies and practices for curation of microbial collections in the CGIAR. This may lead to further initiatives in future years.

IPGRI will invest increased resources on working directly with countries to assist their decision-making on legal and policy issues and on work relating to agrobiodiversity discussions in the context of the Convention on Biological Diversity (CBD), and in trade and intellectual property fora. With the benefit of strengthened staffing in biotechnology and informatics, increased emphasis will be given to the application of biotechnological tools and facilitating access to advances in molecular genetics and genomics by the genetic resources community through capacity building, research, information management and policy analysis. IPGRI will also place increased emphasis in improving and expanding electronic access and delivery of information, including through the System-wide Information Network for Genetic Resources (SINGER) of the SGRP, development of compendia, and use of information tools such as Geographical Information Systems (GIS).

In collaboration with partners including the Global Forum on Agricultural Research (GFAR), IPGRI will continue the development of the "commodity chain" or "filière", approach linking all stages from conservation to consumption. This will address cash or perennial crops such as coconuts, palm oil, coffee, cacao and *Musa*, as well as neglected and underutilized species, building upon the successful experience of the Global Programme for *Musa* Improvement "PRO*MUSA*". Increased attention will be given to the role of effective conservation management and use of plant genetic resources in nutrition, through activities involving *Musa*, and neglected and underutilized species of local importance.

Reflecting the pivotal role of medicinal plants in human health, well-being and incomes, IPGRI will seek additional resources to develop a programme of work to support and improve the scientific basis for managing the genetic diversity of medicinal plants. This work will have a strong socioeconomic dimension which will be served by the further development and implementation of IPGRI's economic research strategy involving understanding the economic aspects of diversity management at the farmer, institution, national and international levels.

Responsible management of programme expansion also requires careful consideration of which areas could receive less attention without prejudicing the achievement of the institute's mission. In this regard, IPGRI will continue to seek to devolve more direct responsibility for implementation of activities to national partners, supported by capacity-building, provision of tools, information (increasingly in electronic format) and training materials. Strong countries are being encouraged to assist weaker ones and regional and crop networks are being encouraged to become more autonomous and self-sustaining. Work on germplasm health and the development of strategies and methodologies for germplasm collecting have been scaled down.

3.2 Programme content 2003-2004

No major changes are expected in programme content in 2003-2004, although there will be some changes in emphasis with the completion of certain project activities and the initiation and full implementation of others. Specific examples will include more emphasis on medicinal and neglected and underutilized species, using the filière approach, managing plant genetic resources as part of the ecosystem (INRM), the role of plant genetic resources in improving the nutritional and health status of poor people, and providing capacity-building tools for policy development by IPGRI's partners. An increased emphasis on *Musa* improvement will be maintained in 2003 and 2004.

3.3 Staffing Highlights

Details of current and planned staffing are contained in Table 9. Highlights include:

?? A very limited increase in overall international staffing numbers, taking opportunities for joint appointments with other CGIAR Centres (one such arrangement was put in place in 1999 and one in 2000) and appointment of complementary staff including Honorary Research Fellows and seconded staff.

?? A revised staff skills portfolio with new expertise acquired in molecular genetics, bioinformatics, post-harvest and marketing expertise and economics in 2000; additional expertise in capacity building, law, and germplasm management are being acquired in 2001, and in nutrition in 2002.

?? An increase in support staff of 4 by 2004, including locally-recruited professional staff (identified as “Supervisory Staff” in Table 9) and locally-recruited support staff to operate IPGRI’s new Headquarters facilities, and to provide programme support to release international staff time for research activities.

4. IPGRI programme linkages to the CGIAR Vision and Strategy

The seven planks of the future integrated strategy of the CGIAR are conspicuous in IPGRI’s plans for the period of time covered by the Medium Term Plan, as outlined below

Plank 1 - People and poverty focus: People, as custodians and users of plant genetic resources are at the centre of IPGRI’s strategic approach. The conservation and use of those resources must meet the diverse nutritional and income-generating needs of the communities dependent upon them, and must

be compatible with the traditions, culture and aspirations of those communities, with an astute balancing of short-term and long-term gains. A focus on poverty is reflected in IPGRI's special attention to coconut and *Musa*, two crops grown predominantly by smallholders, and to neglected and underutilized species that are critical livelihood assets for the rural poor, particularly in marginal areas. Section 5 provides more detail of IPGRI's approach to addressing sustainable poverty reduction.

Plank 2 – Modern science: Whilst plant genetic resources science is built on a foundation of traditional germplasm storage and plant breeding techniques, IPGRI recognises the critical importance of bringing modern science into the arena. IPGRI seeks to use new technologies in a pragmatic and complementary way, and to facilitate access by the institute's partners to those technologies. The opportunities and priorities identified by the major international conference on "Science and Technology for Managing Plant Genetic Resources in the 21st Century" that IPGRI co-hosted in June 2000 will help influence the IPGRI programme in the coming years. In particular, this will involve the application of molecular techniques, informatics, GIS and *in vitro* solutions to intractable problems in understanding, conserving and using genetic resources. The coordination of a global *Musa* genomic consortium will contribute to bringing frontier science to bear on improving this neglected crop.

Plank 3 – Geographical priorities: IPGRI recognises the particular needs of sub-Saharan Africa and South Asia. Among the initiatives that take these priorities into account are efforts to secure additional resources for research on neglected and underutilized species and their special role in the food security and nutrition of the poor in both regions. The plant genetic resources dimensions of HIV/AIDS and malaria will be explored, particularly by the identification of genetic resources of food crops that strengthen the general health status of people at risk of infection. IPGRI is currently involved in efforts to secure additional resources for plant genetic resources sub-regional networks in East Africa (EAPGREN) and West and Central Africa (GRENEWECA). The special needs for training and capacity-building in sub-Saharan Africa have led IPGRI to locate a newly-appointed Training Officer in that Region. Half of the resources of the INIBAP programme are devoted to sub-Saharan Africa.

Plank 4 – Regional approach to research: Regional-based networking has been a prominent part of IPGRI's *modus operandi* for many years. Notwithstanding the need to respond to the heterogeneous nature of the causes of poverty and food insecurity in the different regions, IPGRI also seeks to optimise sharing of information, learning and translation of solutions among regions. IPGRI's efforts in the different regions will continue to seek to optimise collaboration and synergy with partners including other CGIAR Centres and regional organizations of research institutions. IPGRI is

participating actively in ongoing discussions within the CGIAR to further strengthen collaboration among the Centres.

Plank 5 – New partners in science and development: Partnership is at the heart of IPGRI's approach; the breadth and intensity of collaborative interactions continue to grow with time. To help achieve its mission, the institute is continuously seeking creative partnerships with national and regional programmes, donors, other CGIAR Centres, FAO and other intergovernmental agencies, NGOs, farmers, the private sector, advanced research institutes, universities, and communicators. IPGRI is particularly keen to strengthen its partnerships is with development agencies and the private sector. Current examples of IPGRI's efforts in this respect include working with IFAD in research on desertification, leading to the identification of investment opportunities, working with NGOs on dissemination of *Musa* varieties, and working with the private sector on information management and dissemination. Outsourcing to partners is an important feature of IPGRI's *modus operandi,* since it provides a combined opportunity for research and capacity-building. In 2000, the level of outsourcing was similar to that of 1999 and 1998, representing ca. 21% of total expenditure (compared with a level 14% in 1991). It is expected to continue at similar levels in the future.

Plank 6 – Task force approach: Genetic resources research is highly multidisciplinary, requiring inputs from diverse areas of expertise cutting across the biological and social sciences. IPGRI routinely plays a convening role within and outside the CGIAR and will take the Task Force approach to managing the Future Harvest Global Conservation Trust campaign. Another example is the Global Programme for *Musa* Improvement (PRO*MUSA*) that brings together the different stakeholders involved in *Musa* improvement and has been used as a model for other crops in the context of GFAR.

Plank 7 – Catalytic role: Again, IPGRI is predisposed to playing this role through its *modus operandi* that seeks to build capacity within NARS towards their self-reliance. Where the options of taking direct action or of building capacity to enable a partner to take action, priority is generally given to the latter for its contribution to sustainability.

5. Addressing sustainable poverty reduction

Poverty is a multi-faceted condition that is more than low income; it also involves vulnerability, powerlessness and deprivation of basic capabilities. Plant genetic resources hold a strategic position as part of the portfolio of assets that can lift people out of poverty. Eradication of poverty is a key component of the goal of IPGRI as defined in the institutional logframe, alongside increased food security and protection of the environment. These three elements are inextricably linked, since a sustainable environment is not

possible without a significant reduction in poverty, or without access to affordable, nutritious food.

Plant diversity offers goods and services that have the potential to diversify livelihood options not only for the poor of today, but also for future generations. Realization of this potential will require the creation of new knowledge and its application to locating, understanding and securely conserving genetic diversity. Conservation must be compatible with and supported by effective use of the diversity, involving the interplay of institutional and community-based germplasm management systems, and the application of the best science to crop improvement. Finally, the knowledge that allows sound genetic resources management will only achieve its full potential given a supportive national and international context in terms of infrastructure, human resources capacity, and policy framework.

IPGRI's programme is designed against the background described above, to generate a set of outputs that make positive contributions to sustainable livelihoods. The entry points include:

?? Reducing the vulnerability of the plant genetic resources base through improved conservation technologies and strategies, improved genebank management, and networked *ex situ* and *in situ* conservation efforts
?? Increasing the potential for food security, improved nutrition and income generation through the use of plant genetic resources
?? Improving food and income security through higher productivity of *Musa* as a crop of particular importance to the poor
?? Enhancing human capital through training, technology transfer, and provision of information
?? Enhancing social capital through networking, linkage of formal and informal institutions, and protection of indigenous knowledge and cultural values
?? Promoting national and regional structures and policies to favour plant genetic resources conservation and use
?? Promoting a pro-poor policy and legal environment to enhance access to plant genetic resources important to nutrition, food security and income generation.

During the time-span of this Medium Term Plan, IPGRI will give particular attention to assessing the impact of the institute's work on poverty through verifying and quantifying the role that plant genetic diversity plays in the nutrition and economies of the poor. This will involve specific activities within five projects:

- Project 4. Support to plant genetic resources programmes and regional networks in sub-Saharan Africa
- Project 8. Promoting sustainable conservation and use of coconut genetic resources
- Project 13. Human and policy aspects of plant genetic resources conservation and use
- Project 15. Public awareness and impact assessment
- Project 19. Support to regional *Musa* programmes.

6. Financial highlights

6.1 Research agenda requirements

The majority of the funds for 2001 are from identified sources, with one exception of a sum of US$ 0.5 million to be sourced for the SGRP. A request is made to the Financing Committee to support the upgrading of the CGIAR Genebanks and to contribute to the costs of fundraising campaign for the Future Harvest Global Conservation Trust as described below.

Requirements for the plan year 2002 are detailed in the attached tables, with comparative data for 2000, 2001, 2003 and 2004. A total research agenda of US$ 26 million is planned. This reflects a steady increase consistent with the growth foreseen in the IPGRI Strategy *Diversity for Development*, towards a target of a 50% increase in revenues in the 10 year life-time of the strategy.

6.2 Future Harvest Global Conservation Trust

An endowment campaign to support the long-term security of the genetic diversity of the world's most important crops is likely to be a very significant initiative for IPGRI and the CGIAR as a whole during the lifetime of this Medium Term Plan. The 1995 External Review of the CGIAR Centre genebanks, commissioned by the SGRP and the genebank investment and upgrading plan, developed by SGRP in 1999, laid the groundwork for such an initiative. At MTM 2000, the Finance Committee's Working Group on Long-term Resource Mobilization recommended to the CGIAR the further exploration of an endowment for the germplasm collections.

It is foreseen that the Future Harvest Global Conservation Trust would support both the continuing long-term needs of the genebanks through an endowment and support on a project basis for those elements that require immediate, one-off funding. The components of the Trust would include:

?? Bringing all of the CGIAR genetic resources collections to target standards of operation as described in the upgrading plan commissioned by SGRP
?? Ensuring long-term sustainable support for the collections
?? Designing, together with FAO, the elements of an internationally agreed rational global genebank system
?? Ensuring long-term sustainable support for that global system.

An international fundraising group, Community Counselling Service (CCS), has been retained to undertake a feasibility study for the campaign. The study is being co-financed by the SGRP, Future Harvest and World Bank funds made available by the Finance Committee. The study report will be completed by early April 2001, and will include CCS's conclusions and recommendations on the overall feasibility, and the scale, approach, partnerships, and cost of a campaign. Pending the conclusions and recommendations from CCS, IPGRI is studying issues relating to the infrastructure and resources required for the campaign itself if, as is likely, a decision is made to proceed.

6.3 Costing Centre Projects

Non-project costs are attributed to each of the twenty IPGRI projects, basically in direct relation to staff costs, which are directly charged to each project. In 2000, non-project costs amounted to US$ 4.1 million (ca. 19% of total operations). It is envisaged that these costs will remain at about the same level for the period covered by the present MTP.

6.4 Operating reserve

The 2000 surplus in normal operations amounted to US$ 1.9 million. This has enabled the institute to rebuild its reserves significantly and recover much of the loss incurred as a result of the failure of the EC to provide funds in 1999. The reserves currently stand at a level equal to more than 60 days of operations. It should be noted that the reserves currently include the unspent portions of the support provided by the World Bank for SGRP in 1999 and by Italy and Japan to finance the move of IPGRI Headquarters to Maccarese. These special earmarked funds will be completely expended during 2001.